Creutzfeldt-Jakob Disease (CJD)

Agent: Believed to be caused by a prion protein

Mode of Transmission: The majority of CJD cases (80-90%) are sporadic CJD, with no known source. A small percentage of cases (5-15%) may be due to heredity (familial CJD) or exposure to organ tissue contaminated with the prion (iatrogenic CJD). Classic CJD includes sporadic CJD, familial CJD, and iatrogenic CJD. A form of the disease, variant Creutzfeldt-Jakob disease (vCJD), is thought to be transmitted through ingestion of beef from cattle with bovine spongiform encephalopathy (BSE, commonly referred to as mad cow disease).

<u>Signs/Symptoms</u>: Symptoms may begin with confusion, and they rapidly progress to a wide range of neurological signs and symptoms, including loss of coordination and dementia.

<u>Prevention</u>: Organ and tissue transplants from infected individuals should be avoided. For protection against vCJD, the federal government has regulations in place to prevent the spread of BSE in the United States.

Other Important Information: vCJD occurs in younger individuals, while classic CJD occurs more often in older individuals and has a slower progression. In Virginia, CJD is reportable when it occurs in persons under 55 years of age.

No cases of Creutzfeldt-Jakob disease in persons less than 55 years of age were reported in Virginia during 2015. In 2014, two cases were identified; both cases were diagnosed with classic CJD with no known exposures for either case. Ten cases of classic CJD infection have been reported in Virginia residents less than 55 years of age since 1995.

The only case of vCJD diagnosed in a Virginia resident occurred in 2006. Based on the patient's history, the infection most likely occurred from consumption of contaminated cattle products as a child while living in Saudi Arabia. This is one of four cases of vCJD reported in U.S. residents. The most recent vCJD case in the U.S. occurred in 2014 in a Texas resident. This person is thought to have acquired the infection while living overseas.